to some ignorant but unprincipled man, reckless of character from being unacquainted with its value, who had been hired to *make out a case* against me, because my reports were considered to militate against the dogmas of his principles: but my feeling has been one of unmitigated contempt, since I find it universally attributed to one individual—an individual so identified with sordid mendacity, as to render either victory or defeat in any contest with him, equally discreditable. But were this consideration not all-powerful, in my humble opinion no advantage can accrue from the most perfect exposure that can be made; since it is hopeless to expect to convince those who give credence to *such an oracle*, and it is no less hopeless to look for the conversion of a skulking libeller, whose self-gratulations, amid profound contempt, prove his superiority to all sense of shame.

——— Populus me sibilat, at mihi plaudo
Ipse domi.

Refutation on refutation would be perfectly unavailing, for

You break his web of sophistry in vain:
The creature's at his *dirty work* again.

"To those who take any interest in the truth, a careful reading of my reports and of these volumes, will furnish my best vindication from the charge of interested misrepresentation. My statements may be faulty; but I give them as the best I could command. My inferences may be wrong; but until their logical inaccuracy be made evident, I must consider them valid, for they were not hastily nor rashly deduced."

'Coarse,' 'dishonest,' 'skulking libeller,' are ugly epithets: they are intended, we understand, for Mr. Zachary Macauley; but we wash our hands of this dirty business, and shall proceed to tell our readers what Mr. Mackenzie said and heard, and thought in Haiti during his abode there, the first time we can find space and opportunity.

The Cabinet Cyclopædia, Vol. 5, Mechanics. By Captain H. Kater, V. P. R. S. and Dr. Lardner.—London, Longman, Rees, Orme, Brown and Green.

THE present volume contains a complete system of an important and popular branch of natural philosophy, divested, as much as possible, of those scientific technicalities which can be understood only by the regular student. Though the name of Captain Kater is put foremost in the title page, he contributes one chapter only to the work, and that the last: it is, however, a very valuable one, and comprises nearly one fifth of the volume; it treats of balances and pendulums, the instruments on which the measurement of weight and time depends. The whole of the preceding chapters are written by Dr. Lardner, and reflect great credit on his skill in conveying scientific knowledge in what is called popular language, that is to say, not in mathematical language; though still there are too many A. B's and C. D's in it, and too many references to plates and figures, to allow the book to be considered light summer reading by the ladies. We select a brief passage from the chapter on the properties of matter, as a specimen of the manner in which important information is conveyed:

"Newton succeeded in determining the thickness of very thin laminæ of transparent substances by observing the colours which they reflect. A soap bubble is a thin shell of water and is observed to reflect different colours from different parts of its surface. Immediately before the bubble bursts, a black spot may be observed near the top. At this part the thickness has been proved not to exceed the 2,500,000th of an inch."

. . . . .

"The organised world offers still more remarkable examples of the inconceivable subtilty of matter.

"The blood which flows in the veins of animals is not, as it seems, an uniformly red liquid. It consists of small red globules, floating in a transparent fluid called *serum*. In different species these globules differ both in figure and in magnitude. In man and all animals which suckle their young, they are perfectly round or spherical. In birds and fishes they are of an oblong spheroidal form. In the human species, the diameter of the globules is about the 4000th of an inch. Hence it follows, that in a drop of blood which would remain suspended from the point of a fine needle, there must be about a million of globules.

"Small as these globules are, the animal kingdom presents beings whose whole bodies are still more minute. Animalcules have been discovered, whose magnitude is such, that a million of them does not exceed the bulk of a grain of sand; and yet each of these creatures is composed of members as curiously organised as those of the largest species; they have life and spontaneous motion, and are endued with sense and instinct. In the liquids in which they live, they are observed to move with astonishing speed and activity; nor are their motions blind and fortuitous, but evidently governed by choice, and directed to an end. They use food and drink, from which they derive nutrition, and are therefore furnished with a digestive apparatus. They have great muscular power, and are furnished with limbs and muscles of strength and flexibility. They are susceptible of the same appetites, and obnoxious to the same passions, the gratification of which is attended with the same results as in our own species. Spallanzani observes, that certain animalcules devour others so voraciously, that they fatten and become indolent and sluggish by over-feeding. After a meal of this kind, if they be confined in distilled water, so as to be deprived of all food, their condition becomes reduced; they regain their spirit and activity, and amuse themselves in the pursuit of the more minute animals, which are supplied to them; they swallow these without depriving them of life, for, by the aid of the microscope, the one has been observed moving within the body of the other. These singular appearances are not matters of idle and curious observation. They lead us to enquire what parts are necessary to produce such results. Must we not conclude that these creatures have heart, arteries, veins, muscles, sinews, tendons, nerves, circulating fluids, and all the concomitant apparatus of a living organised body? And if so, how inconceivably minute must those parts be! If a globule of their blood bears the same proportion to their whole bulk as a globule of our blood bears to our magnitude, what powers of calculation can give an adequate notion of its minuteness.

"These and many other phenomena observed in the immediate productions of nature, or developed by mechanical and chemical processes, prove that the materials of which bodies are formed are susceptible of minuteness which infinitely exceeds the powers of sensible observation, even when those powers have been extended by all the aids of science."

We remember a striking passage somewhere in Dr. Chalmer's Astronomical discourses, in which he adverts to the invention of the microscope almost immediately after that of the telescope, as if it had been intended by Providence to preserve mankind from the danger of deeming that an individual human being might possibly be lost in the immensity of creation, discovered to them by the former instrument, by shewing with the latter, the exquisite organization, and therefore the fostering care of the Deity, even in inconceivably minute portions of matter. Of the force and truth of this remark we think the foregoing extract a striking illustration.

NOTICES OF BOOKS.

An Account of the Varieties in the Arterial System of the Human Body. By P. H. Green, A.B., M.B. Trinity College, Dublin; illustrated by Plates. 8vo. pp. 48.—Dublin, Leckie.

CONSIDERED, with reference to the Wolfian definition of beauty—"unity and variety"—what can be more beautiful than the human frame, in the structure of which nature seems to work in her wildest and most varied mood—yet with perfect uniformity of purpose? Dr. Green's manual of the varieties of arteries is a very interesting and valuable contribution to the advancement of Operative Surgery. The plates are supplementary to those of Ticdernan, as published by Dr. Knox; but the book itself is, we think, the best book of reference for the illustration of the whole series. It is in works of this description—works which can only be accomplished by industry and perseverance—that the Germans surpass us, as they do all other European nations; but we trust that the present publication gives sufficient earnest of what may yet be done in our own school. We should add, that Dr. Green, in drawing up his book, enjoyed the privilege of the free use of Dr. Macartney's Cabinet; this alone were a high recommendation.

A New and Comprehensive Topographical Dictionary. By John Gorton. Forty-eight 4to. Maps.—London, Chapman and Hall.

THIS work is publishing in monthly Parts, under the conduct of the well-known Editor of the 'Biographical Dictionary'—the best abridgment of the kind we are acquainted with. It is to be completed in 42 Nos. four of which have already appeared, and do great credit to the industry and care of the compiler. Not merely the general features of every town and parish are described, but its situation, population, distance from next post town, from the metropolis; and many other interesting particulars are given, with great minuteness and accuracy.

The maps are well and clearly engraved, by Sidney Hall; and altogether the work is very neatly and creditably, as well as cheaply, executed. We should mention that the topographical description extends only to Great Britain and Ireland.